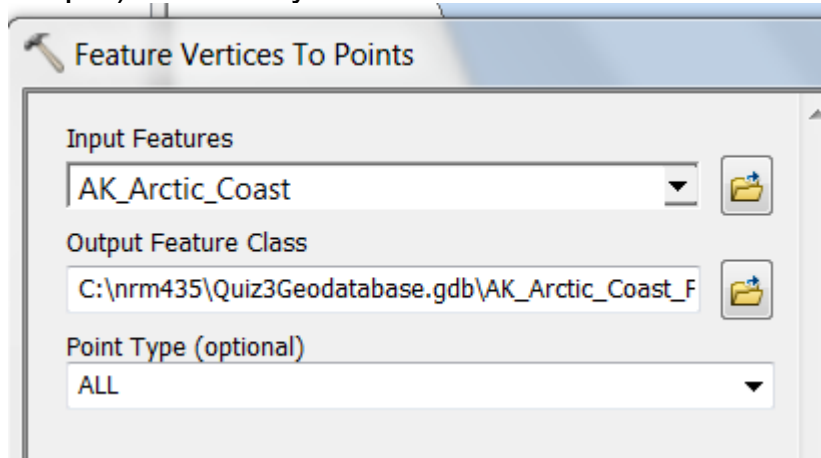


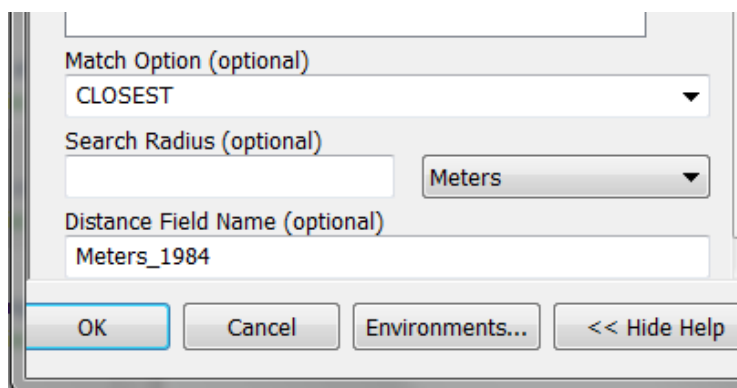
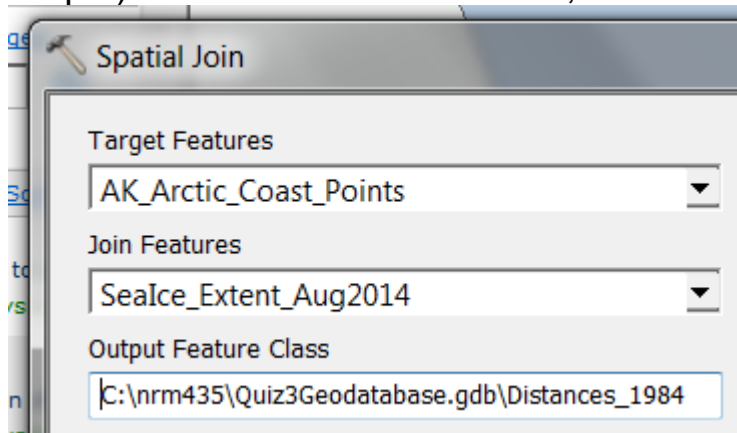
KEY QUIZ#3: August Sea Ice Extent

Develop a table of the mean distance in KM from the 140 coastline vertices to the closest August sea ice in 1984 and 2014.

Step 1) Create layer of coast line vertices.



Step 2) For each coast line vertex, determine closest distance to sea ice in 1984.



Repeat for 2014.

Distances_1984			Distances_2014		
Shape *	Join_Count	Meters_1984	Join_Count	Meters_2014	
Point	1	10,967.4	1	270,420.0	
Point	1	8,606.3	1	270,200.2	
Point	1	14,024.4	1	276,697.3	
Point	1	12,709.1	1	278,234.6	

Step 3) Get the mean distance to sea ice for 1984, 2014.

Summary Statistics

	Input Table	Output Table	Statistics Field(s)
1	Distances_1984	C:\nrm435\Quiz3Geodatabase.gdb\Distances_1984_Mean	Meters_1984 MEAN
2	Distances_2014	C:\nrm435\Quiz3Geodatabase.gdb\Distances_2014_Mean	Meters_2014 MEAN

Step 4) Create final table with MeanKM_1984, MeanKM_2014

You can use the **Join Field** geoprocessing to merge together 2 tables.

FREQUENCY	MEAN_Meters_1984	MEAN_KM_1984	MEAN_Meters_2014	MEAN_KM_2014
140	58,884.5	58.9	247,798.4	247.8